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(54) **SERVICE FUNCTION CHAINING SFC-BASED PACKET FORWARDING METHOD, APPARATUS, AND SYSTEM**

(57) The present invention discloses an SFC-based packet forwarding method, an apparatus, and a system, which can implement redirection of a packet forwarding path through automatic configuration that is performed by a control node on a service function forwarding node. The packet forwarding method includes: receiving, by a first service function forwarding node, a packet forwarding rule sent by a control node, where the packet forwarding rule is used to indicate a mapping relationship between a match item of traffic characteristic information of a packet and route prefix information; receiving, by the first service function forwarding node, a first packet, where a header of the first packet carries traffic characteristic information of the first packet; determining, by the first service function forwarding node based on the packet forwarding rule, target route prefix information corresponding to the traffic characteristic information of the first packet; and determining, by the first service function forwarding node, target next-hop information based on the target route prefix information, and forwarding the first packet based on the target next-hop information.

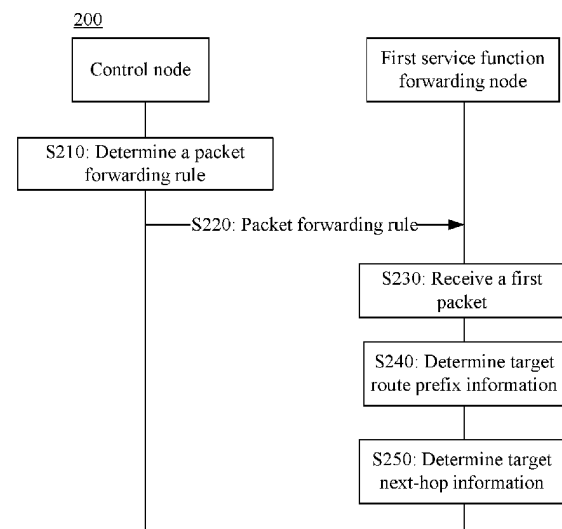


FIG. 2

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EUROPEAN SEARCH REPORT

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EPO FORM 1503 03.82 (P04C01)

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	QUINN P ET AL: "Network Service Header; draft-ietf-sfc-nsh-05.txt", NETWORK SERVICE HEADER; DRAFT-IETF-SFC-NSH-05.TXT, INTERNET ENGINEERING TASK FORCE, IETF; STANDARDWORKINGDRAFT, INTERNET SOCIETY (ISOC) 4, RUE DES FALAISES CH- 1205 GENEVA, SWITZERLAND, 27 May 2016 (2016-05-27), pages 1-38, XP015113233, [retrieved on 2016-05-27] * pages 10,17 *	1-6	INV. H04L45/64 H04L45/302
X	BOUCADAIR M ET AL: "Service Function Chaining (SFC) Control Plane Components & Requirements; draft-ietf-sfc-control-plane-06.txt", SERVICE FUNCTION CHAINING (SFC) CONTROL PLANE COMPONENTS & REQUIREMENTS; DRAFT-IETF-SFC-CONTROL-PLANE-06.TXT, INTERNET ENGINEERING TASK FORCE, IETF; STANDARDWORKINGDRAFT, INTERNET SOCIETY (ISOC) 4, RUE DES FALAISES CH- 1205 GENEVA, SWITZERLAND, 20 May 2016 (2016-05-20), pages 1-27, XP015113156, [retrieved on 2016-05-20] * page 5; figure 1 * * section 3.3.2; page 12 *	1,4	TECHNICAL FIELDS SEARCHED (IPC) H04L
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 24 August 2023	Examiner Tsuchiya, Kuni
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	